Ultrafine Particles

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U.S. Environmental Protection Agency
Pacific Southwest Region 9

To protect human health and to safeguard the natural environment – air, water and land – upon which life depends.

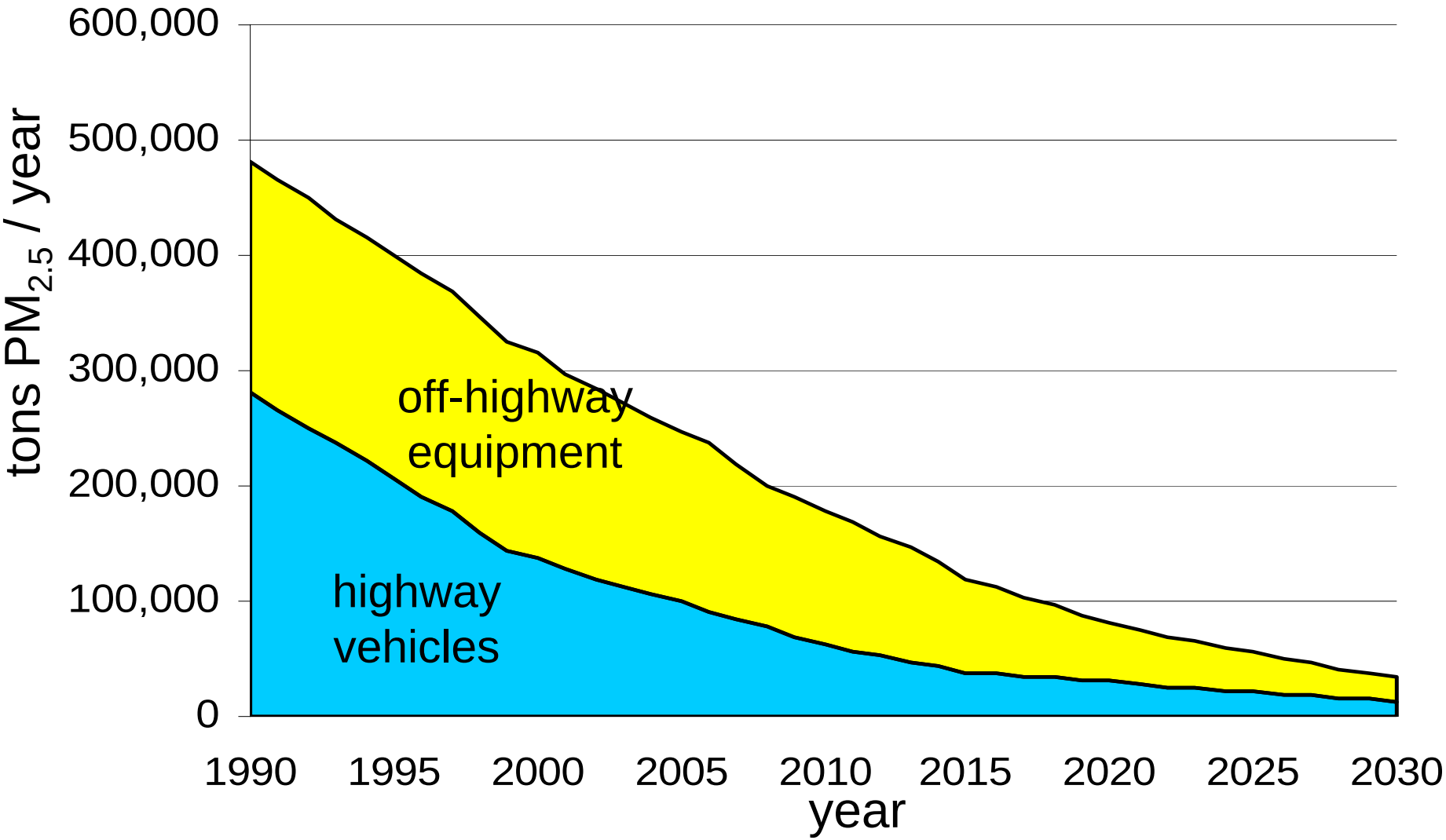
Existing and Future EPA Programs related to Ultrafine PM

- Existing and proposed PM NAAQS
- Diesel Regulations and Voluntary Programs
- Research
- Funding

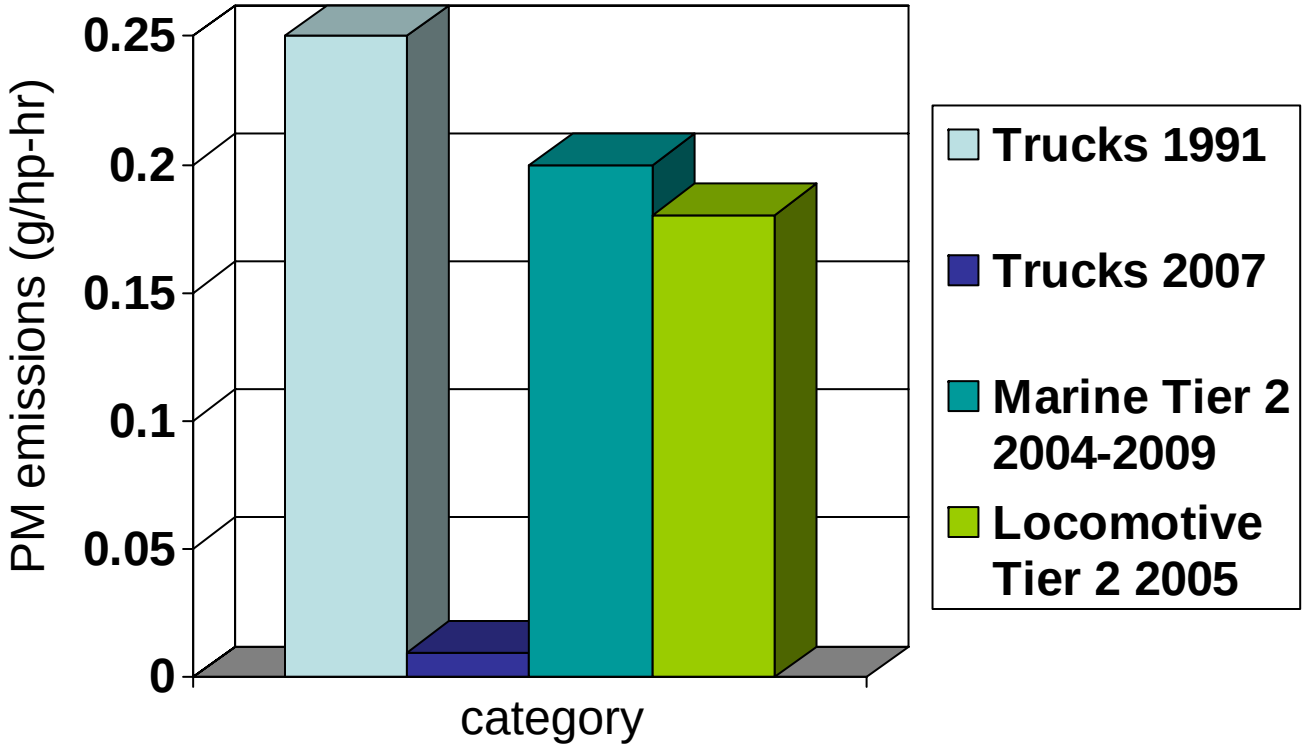
EPA's PM NAAQS

Pollutant	**Primary Standards** (µg/m³)	**Averaging Times**
PM_{10}	50	Annual
	150	24-hour
$PM_{2.5}$	15.0	Annual
	65	24-hour
$PM_{10-2.5}$ (proposed)	None	Annual
	70	24-hour
$PM_{2.5}$ (proposed)	15.0	Annual
	35	24-hour

Impact of Mobile Source Programs on Diesel $PM_{2.5}$



Current Diesel Standards for Locomotive/Marine



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STAR Grant funding for PM Centers ($40M award)

- Johns Hopkins PM Research Center
- Harvard Particle Center
- Southern California Particle Center
- San Joaquin Valley Aerosol Health Effects Center (University of California, Davis)
- University of Rochester PM Center

Summary

- EPA recognizes ultrafine PM as an emerging issue where more research on health effects and controls are needed
- EPA will address a separate standard for ultrafine PM in next NAAQS review
- Mobile control measures reduce PM, including ultrafine PM
- Significant EPA investment in ultrafine through existing and future programs